ABSTRACT

METHOD OF RESOURCE ALLOCATION IN A MULTIPLE ACCESS
5 ## WIRELESS COMMUNICATIONS NETWORK

A scheme is provided for allocating spectral resource made up of a plurality of resource units in a multiple access wireless link linking a partition of a base station and at least one child user equipment of the partition in a wireless communications network. According to the

10 scheme the same fixed allocation of resource units is made to each user equipment of the network. According to one embodiment a measure of a maximum likely number of child user equipments per partition of the network is determined. Then a fixed allocation of resource units based on the ratio of the number of resource units per

15 unit time to the measure is calculated. Then the same fixed allocation of resource units is allocated to each child user equipment across the network. In one embodiment resource units which are not allocated in the fixed allocation remain unallocated to user equipments. In another embodiment the remaining resource units are allocated among the child

20 user equipments by prioritising user equipments having a high gain link. Also provided is a communications network and a resource allocation controller for a communications network which use the above scheme.

Figure 3.